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Department of Agronomy

Turfgrass Varieties, Cultivars, and Seed Labels

Jeff Lefton, Extension Turfgrass Specialist

This bulletin covers three areas:

- Selection of turfgrass varieties and cultivars for various sites.
- Turfgrass varieties and cultivars for Indiana.
- Turfgrass seed label interpretation.

Specific Site Situations and Seed Recommendations

- Sunny area (irrigated; mowed properly; fertilized two or more times per year).

1. 100% Kentucky bluegrass blend with at least 3 varieties.
Use 1.5 lb. of seed per 1,000 sq.ft.
2. 80% or more Kentucky bluegrass plus 20% or less turf-type perennial ryegrass.
Use 3 to 4 lb. per 1,000 sq.ft.

3. 100% Turf-type tall fescue.
Use 6 to 8 lb. of seed per 1,000 sq. ft.

- Sunny area (limited irrigation; mowed properly; fertilized at least once, preferably 2 or more times).

1. 100% Turf-type tall fescue.
Use 6 to 8 lb. of seed per 1,000 sq.ft.
2. Kentucky bluegrass plus turf-type perennial ryegrass (various percentages).
Use 3 to 4 lb. of seed per 1,000 sq.ft.

- Shade (dry; lower maintenance)

1. 30 to 50% Kentucky bluegrass (blend of 2 or 3 shade-tolerant varieties) plus 30 to 60% fine fescue and/or 0 to 20% turf-type perennial ryegrass.
Use 4 to 5 lb. of seed per 1,000 sq.ft.
2. 100% turf-type tall fescue.
Use 6 to 8 lb. of seed per 1,000 sq.ft.

- Shade (wet; lower maintenance)

1. 70% or more Sabre rough bluegrass (*Poa trivialis*) plus a blend of shade-tolerant Kentucky bluegrasses.
Use 2 to 4 lb. of seed per 1,000 sq.ft.

- Athletic Fields

1. 100% turf type tall fescue.
Use 6 to 8 lb. of seed per 1,000 sq.ft.
2. 80% or more Kentucky bluegrass blend at least two varieties plus 20% or less turf type perennial ryegrass.
Use 3 to 4 lb. of seed per 1,000 sq.ft.
(NOTE: Overseeding with a turf-type tall fescue is not recommended in a bluegrass or bluegrass-ryegrass turf situation.)

- Alkaline and saline (salt) soil conditions.

1. Use a mixture containing 'Fults' alkaligrass. Two examples of mixtures containing alkali-grass appear in Table 1.

Table 1. Two Alkali-grass Seed Mixtures.

	Percent
Tall Fescue	30
Perennial Ryegrass	10
'Dawson' Red Fescue	10
'Scaldis' Hard Fescue	10
'Fults' Alkali-grass	40
Kentucky Bluegrass	30
Perennial Ryegrass	10
'Dawson' Red Fescue	10
'Scaldis' Hard Fescue	10
'Fults' Alkali-grass	40

Recommended Varieties and Cultivars

Table 2 lists various varieties and cultivars recommended by Purdue turfgrass researchers. They are representative of products available on the market.

Interpreting Turfgrass Seed Labels

A good turf area starts with the selection of the correct turfgrasses for a given set of conditions. Quality seed is usually more expensive. To deter-

mine the value it is important to be able to correctly interpret a turfgrass seed label.

In Indiana the seed law is a "truth in lending" law. If the percentage is correctly stated on the label, it meets the intent of the present law. However, one needs to look at the label much more closely to properly evaluate quality to establish value. An example of a typical seed label follows.

18.8% Adelphi Kentucky bluegrass	85% germination
32.1% Merit Kentucky bluegrass	83% germination
31.0% American Kentucky bluegrass	85% germination
14.9% Fiesta perennial ryegrass	90% germination
0.0% Crop	
0.2% Weed	
3.0% Inert	

Purity

The purity figure indicates the percent, by weight, of pure seed of each component in the mixture. Not all the pure seed is live seed. The purity for Adelphi Kentucky bluegrass in the sample seed label is 18.8%.

Table 2. Recommended Varieties and Cultivars.

Kentucky Bluegrass	
America	Touchdown*
Mystic	Majestic
Eclipse*	Bristol*
Ram I	Nassau
Plush	Merit
Sydsport	Birka*
Adelphi	Victa*
Glade*	Enmundi
Fine Leafed Fescue	
Reliant*	Banner*
Biljart*	Koket*
Scaldis*	Jamestown*
Waldina*	
Perennial Ryegrass	
Palmer*	Citation II*
Prelude	Birdie II*
Yorktown	Premier
Diplomat	Regal*
Pennfine	Manhattan II*
Fiesta II*	Repell
All Star	Blazer
Derby	
Turf-Type Tall Fescue	
Rebel*	Jaguar*
Falcon*	Arid
Houndog*	Apache
Olympic*	Finelawn*
Rebel II	Pennant
Adventure	Galway
Mustang	

* Reported to be shade tolerant. (Refer to AY-14, "Improving Home Lawns in Shade.")

Germination

The germination figure indicates the percent of pure seed that will grow. Table 3 contains guidelines for establishing reasonable germinations for various cool season grasses. The germination percents for Kentucky bluegrass in the sample seed label all fall within the 80-85% range.

The other factors that must be considered in evaluating a seed mixture or blend are the % crop, % weed, and % inert.

Table 3. Germination Ranges for Various Cool Season Grasses.

Turf-type	Minimum%	High Quality%
Kentucky bluegrass	80	85
Fine fescue	85	90
Perennial ryegrass	85	90
Tall fescue	85	90

Crop

The crop figure indicates the percent, by weight, of seeds in a package that are grown as a cash crop. This includes many of the coarse hay or pasture grasses. Examples of crop may include orchardgrass, timothy, redtop, clover, and bentgrass. The crop percentage for high quality bluegrass should be as close as possible to 0.00%, as it is in the sample seed label. As a general guideline, anything over 0.5% should be avoided.

A label indicating 0.1% crop is approximately 1-1/2 oz. in 100 lb.. A seeding of 50 lb. of Kentucky bluegrass per acre with 0.1% crop on the label is like spreading 60,000 timothy seeds or 235,000 bentgrass seeds. The law states that if the percent crop is greater than 5% by weight, the crop seed must be listed by its specific name.

Weed

The weed figure indicates the percent, by weight, of weed seeds in the package. A weed is any seed that has not been included in pure seed or crop. As a general guideline, anything over 0.3% should be avoided.

A seeding of 50 lb. of Kentucky bluegrass per acre with 0.05% weeds on the label is like spreading 18,000 knotweed seeds, 140,000 chickweed seeds, or 37,000 *Poa annua* seeds. The maximum by law in Indiana is 2.5%. Unfortunately, this does not protect the purchaser of high quality turfgrass seed blends or mixtures.

Noxious Weeds

This defines the number per pound or per ounce of weed seeds considered legally undesirable. Most of those listed for Indiana are not problems in turf areas. The list is designed for farm fields.

Inert

Inert indicates the percent, by weight, of material in the container that will not grow. This includes corn cobs or chaff for bulk to make the package larger. Sand may be added so that the package can meet weight requirements.

Seed with more than 8% inert should be avoided. As a general guideline, higher quality bluegrass seed should be less than 4% inert. The percent inert by weight on the package x 2 equals the approximate percent inert by volume in the package. For example, the inert figure in the sam-

ple seed label is 3%. This would be approximately 6% volume. For a seed label reading 12%, this would approximate 24% by volume.

Date Tested

Check the date on the seed label. This date should be within the last nine months.

The best bet on getting a good mixture or blend of seed is to buy name brands from a reputable seed house or your local garden shop.

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